

Notice of Allowability

Application No.

09/110,018

Examiner

Jason T. Whipkey

Applicant(s)

SATO ET AL.

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the request for continued examination filed 02 May 2005.
2. ☒ The allowed claim(s) is/are 1,3,12,14,23,25 and 34-36 (now renumbered 1,2,4,5,7,8,3,6 and 9, respectively).
3. ☒ The drawings filed on 02 July 1998 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John Krause on July 27, 2005.

2. Replace the listing of claims with the following:

1. (Currently Amended) An image pickup apparatus comprising:

an image pickup device adapted to pick up an image of an object to output an image signal;

an image processing device adapted to process the image signal in accordance with a photographing timing instruction signal output in response to depression of an instruction button, to generate first-resolution image data and second-resolution image data having a resolution which is not higher than that of the first-resolution image data;

a storage control device adapted to store, in a memory, the first- and second-resolution image data of image signals of a series of frames which are obtained by consecutively picking up the image of the object;

a display control device adapted to display, on a display screen immediately after image pickup of the series of frames, the second-resolution image data thereof of the series of frames stored in said memory on a display screen, immediately after image pick up of the series of frames;

a compression encoding device adapted to compress and encode, at a predetermined compression ratio, the first-resolution image data read out from said memory; and

an output device adapted to ~~output~~ select compressed and encoded image data of a desired frame corresponding to the second-resolution image data selected by a selection operation from the compressed and encoded first-resolution image data of the series of frames of the image, compressed and encoded by said compression encoding device, and output the selected compressed and encoded image data to a non-volatile memory in response to selecting the desired frame,

wherein said compression encoding device and said output device are arranged so that said compression encoding device compresses and encodes the first resolution image data re-read out from said memory, corresponding to the selected second-resolution image data, at a compression ratio different from the predetermined compression ratio and said output device outputs the thus-compressed and encoded first-resolution image data to said non-volatile memory.

2. (Canceled)

3. (Previously Presented) An apparatus according to Claim 1, further comprising a transmission device adapted to transmit the selected image data.

4-11. (Canceled)

12. (Currently Amended) An image pickup method comprising:
a step of processing the image signal in accordance with a photographing timing instruction signal output in response to depression of an instruction button, to generate first-resolution image data and second-resolution image data having a resolution which is not higher than that of the first-resolution image data;
a first outputting Step of outputting a designation signal so as to process image signals of a plurality of frames in said image processing step;
a storage step of storing, in a memory, the first-and second-resolution image data of the image signals of a series of frames which are obtained by picking up an image of the object in said picking up step;

a step of displaying, on a display screen immediately after image pickup of the series of frames, the second-resolution image data thereof stored in said memory of the series of frames stored in said storage step, immediately after image pick up of the series of frames;

a step of compressing and encoding, at a predetermined compression ratio, the first-resolution image data of the series of frames read out from said memory; and

a second outputting step of outputting selecting compressed and encoded image data of a desired frame corresponding to the second-resolution image data selected by a low-resolution image data selection operation from the compressed and encoded first-resolution image data of the series of frames of the image, compressed and encoded in said compressing and encoding step, and outputting the selected compressed and encoded image data to a non-volatile memory in response to selecting the desired frame,

wherein said compressing and encoding step and said outputting step are arranged so that said compressing and encoding step compresses and encodes the first-resolution image data re-read out from said memory, corresponding to the selected second-resolution image data at a compression ratio different from the predetermined compression ratio and said outputting step outputs the thus-compressed and encoded first-resolution image data to said non-volatile memory.

13. (Canceled)

14. (Currently amended) A method according to Claim 12, further comprising a step of transmitting the image data selected in said second outputting step.

15-22. (Canceled)

23. (Currently Amended) A storage medium storing a control program for an image pickup apparatus in a state readable from a computer, the control program comprising:

a step of picking up an image of an object to output an image signal;

a step of processing the image signal in accordance with a photographing timing instruction signal output in response to depression of an instruction button, to generate first-resolution image data and second-resolution image data having a resolution which is not higher than that of the first-resolution image data;

~~a first outputting step of outputting a designation signal so as to process image signals of a plurality of frames in said image processing step;~~

a storage step of storing, in a memory, the first-and second-resolution image data of the image signals of a series of frames which are obtained by picking up an image of the object in said picking up step;

a step of displaying, on a display screen immediately after image pickup of the series of frames, the second-resolution image data thereof stored in said memory ~~of the series of frames stored in said storage step; immediately after image pick up of the series of frames;~~

a step of compressing and encoding, at a predetermined compression ratio, the first-resolution image data of the series of frames read out from said memory; and

an outputting step of selecting compressed and encoded image data corresponding to the second-resolution image data selected by a selection operation from the first-resolution image data of the series of frames, compressed and encoded in said

Art Unit: 2612

compressing and encoding step, and outputting the selected compressed and encoded image data to a non-volatile memory,

wherein said compressing and encoding step and said outputting step are arranged so that said compressing and encoding step compresses and encodes the first-resolution image data re-read out from said memory, corresponding to the selected second-resolution image data at a compression ratio different from the predetermined compression ratio and said outputting step outputs the thus-compressed and encoded first-resolution image data to said non-volatile memory.

24. (Canceled)

25. (Currently Amended) A medium according to Claim 23, wherein the control program further comprises a step of transmitting the image data selected in said second outputting step.

26-33. (Canceled)

34. An apparatus according to Claim 1, wherein said display control device is arranged so as to enlarge and display on the display screen image data corresponding to the second-resolution image data selected by the ~~low-resolution~~ image data selection operation from the second resolution image data of the series of frames, displayed on the display screen.

Art Unit: 2612

35. (New) A method according to Claim 12, wherein said displaying step is arranged to enlarge and display on the display screen image data corresponding to the second resolution image data selected by the low-resolution image data selection operation from the second-resolution image data of the series of frames, displayed on the display screen.

36. A medium according to Claim 23, wherein said displaying step is arranged so as to enlarge and display on the display screen image data corresponding to the second resolution image data selected by the ~~low-resolution~~ image data selection operation from the second-resolution image data of the series of frames, displayed on the display screen.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Whipkey, whose telephone number is (571) 272-7321. The examiner can normally be reached Monday through Friday from 9:00 A.M. to 5:30 P.M. eastern daylight time.

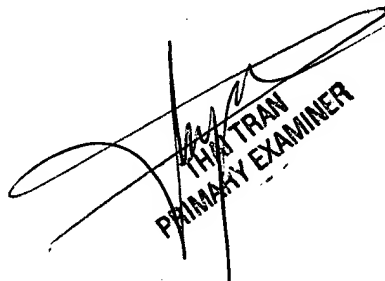
Art Unit: 2612

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran, can be reached at (571) 272-7382. The fax phone number for the organization where this application is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JTW
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July 27, 2005


THAI TRAN
PRIMARY EXAMINER